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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,471	11/26/2003	Johnny Zhong	15436.131.1	9866

7590 03/08/2007  
WORKMAN NYDEGGER  
1000 Eagle Gate Tower  
60 East South Temple  
Salt Lake City, UT 84111

EXAMINER
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CONNELLY CUSHWA, MICHELLE R

ART UNIT	PAPER NUMBER
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2874

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/724,471	Applicant(s) ZHONG ET AL.	
	Examiner Michelle R. Connelly-Cushwa	Art Unit 2874	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-4,6-12 and 14-26 is/are pending in the application.
- 4a) Of the above claim(s) 3,16,17,22 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4,6-12 and 14-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's Amendment filed July 21, 2006 has been fully considered and entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Regarding claims 24-26; the claims contain the limitation "a form factor that is substantially compliant with one of the Small Form Factor Multi-Source Agreement (SFF MSA) or the Small Form Factor Pluggable Multi-Source Agreement (SPF MSA)". This limitation renders the claims indefinite because it recites a standard and standards may be revised and/or changed over time.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2, 4, 6, 7-12, 14, 15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grasis et al. (US 6,198,857 B1) in view of Donaldson (US 6,301,407 B1).**

Regarding claims 2, 7-9, 12, 14 and 21; Grasis et al. discloses an optical add/drop patch cord (see Figure 6) comprising:

- an optical add/drop component (110, 112) disposed in a casing (116),  
the optical add/drop component (110, 112) comprising:
  - o an optical substrate (glass substrate, 32 in Figure 3A);
  - o a first thin film (48 in Figure 3A) formed on a first end of the optical substrate; and
  - o a second thin film (60 in Figure 3A) formed on a second end that opposes the first end;
- an input fiber (118) permanently coupled to the casing (116) and optically coupled to the optical add/drop component (110);
- a drop fiber (124) permanently coupled to the casing (116) and optically coupled to the optical add/drop component (110);
- an add fiber (128) permanently coupled to the casing (116) and optically coupled to the optical add/drop component (110); and
- an output fiber (130) permanently coupled to the casing (116) and optically coupled to the optical add/drop component (110);
- wherein the first thin film is configured to allow at least one wavelength of an optical signal from the input fiber (118) to pass through the first

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thin film towards the drop fiber (124) while reflecting other wavelengths of the optical signal to the second thin film; and

- the second thin film is configured to reflect the other wavelengths of the optical signal towards the output fiber (130) while allowing at least one wavelength to pass through the thin film from the add fiber (128) towards the output fiber (130).

Grasis et al. does not explicitly disclose that connectors are attached to an end of the input, drop, add and output fibers.

It is within the level of ordinary skill in the art to attach connectors in the form of ferrules or strain relief boots to the end of any optical fiber inserted within a casing in order to provide support and stress relief for the optical fiber at the location where the optical fiber is secured to the casing. Donaldson discloses an optical patch cord comprising a casing (16) containing a substrate (18) having filters (24, 25, 26) coupled to input/output optical fibers (10, 11, 12, 13, 14, 15), wherein connectors (17) are attached to ends of the optical fibers to hermetically seal the optical fiber connections to the casing. Therefore, one of ordinary skill in the art would have found it obvious to provide optical connectors attached to an end of each of the input, drop, add and output fibers in the invention of Grasis et al. in order to provide support and stress relief to the optical fibers where they are attached to the casing, as is customary in the art, and to further provide connectors that ensure a hermetic seal to protect the optical add/drop component from the environment, as taught by Donaldson.

Regarding claims 4, 11 and 15; the tubes (17) disclosed by Donaldson are solder ferrules (see column 3, lines 4-14).

Regarding claim 6; collimating elements (122) are included for ensuring that light is not dispersed within the optical add/drop element in the invention of Grasis et al.

Regarding claims 10 and 20; one of ordinary skill in the art would have found it obvious to secure the fibers to the casing in a detachable manner in order to allow the fibers to be easily removed and replaced when damaged, as this is a well known advantage of providing detachable elements.

Regarding claims 18 and 19; see column 1, line 66, through column 2, line 17, and column 10, line 64, through column 11, line 44 of Grasis et al.

### ***Response to Arguments***

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Cox et al. (US 7,001,081) ; Chang et al. (US 6,644,865) ; Waldron et al. (US 6,634,801); Manning (US 5,781,681); and Peterson et al. (US 5,425,120) each disclose strain relief boots for connecting optical fibers.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning the merits of this communication should be directed to Examiner Michelle R. Connelly-Cushwa at telephone number (571) 272-2345. The examiner can normally be reached 9:00 AM to 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general or clerical nature should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562.

  
Michelle R. Connelly-Cushwa  
Patent Examiner  
March 4, 2007